

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number  
WO 2004/018226 A2

(51) International Patent Classification<sup>7</sup>:

B60B

(21) International Application Number:

PCT/US2003/026137

(22) International Filing Date: 20 August 2003 (20.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/404,835 20 August 2002 (20.08.2002) US  
60/439,911 13 January 2003 (13.01.2003) US

(71) Applicant (for all designated States except US): THERMAL STRUCTURES, INC. [US/US]; 2362 Railroad Street, Corona, CA 92880 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BARNES, Vaughn, V. [US/US]; 174 Shorecliff Road, Corona Del Mar, CA 92625 (US).

(74) Agent: FISH, Robert, D.; Rutan & Tucker, 611 Anton Blvd., 14th Floor, Costa Mesa, CA 92626 (US).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

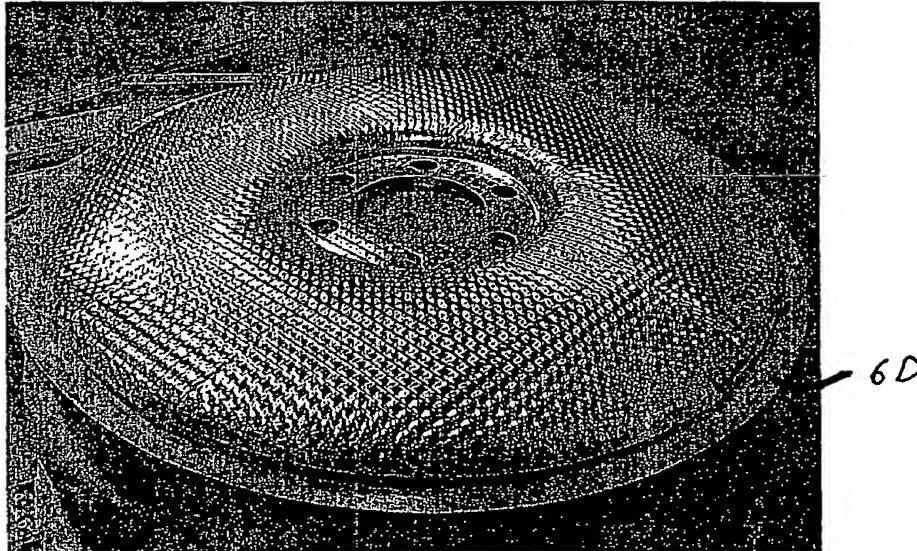
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: WHEEL SHIELD



WO 2004/018226 A2

(57) Abstract: A wheel shield adapted to protect a wheel from materials such as brake dust, and in so doing modify the appearance of a wheel and/or modify the flow of air across an outboard surface of the wheel. Also disclosed are a method of mounting a wheel shield to a vehicle, as well as features that improve the shield's ability to dissipate heat, and which improve visibility of the shield while decreasing the amount of glare produced by the shield.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*